

Numerical Relativity for Space-Based Gravitational Wave Astronomy

In the next decade, gravitational wave instruments in space may provide high-precision measurements of gravitational-wave signals from strong sources, such as black holes. Currently variations on the original Laser Interferometer Space Antenna mission concepts are under study in the hope of reducing costs.

Even the observations of a reduced instrument may place strong demands on numerical relativity capabilities. Possible advances in the coming years may fuel a new generation of codes ready to confront these challenges.